

Map Unit Description (MN)

Blue Earth County, Minnesota

[Data apply to the entire extent of the map unit within the survey area. Map unit and soil properties for a specific parcel of land may vary somewhat and should be determined by onsite investigation]

17--Minneopa sandy loam, 0 to 3 percent slopes

Minneopa

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 0 to 3 percent

Parent material: coarse-loamy outwash over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	sandy loam	moderately rapid	1.94 to 2.24 in	5.6 to 7.3
Bw -- 15 to 20 in	sandy loam	moderately rapid	0.36 to 0.56 in	6.1 to 7.3
2C -- 20 to 60 in	loamy sand	rapid	1.59 to 3.58 in	6.1 to 8.4

Alluvial land

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

17--Minneopa sandy loam, 0 to 3 percent slopes

Comfrey

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class: poorly drained

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

18--Comfrey clay loam

Comfrey, occasionally flooded

Extent: 90 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: fine-loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: occasional

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Ap --	0 to 9 in	clay loam	moderate	1.63 to 1.99 in	6.6 to 7.8
A --	9 to 34 in	loam	moderate	3.97 to 4.96 in	6.6 to 7.8
C --	34 to 60 in	loam	moderate	3.90 to 4.94 in	6.6 to 8.4

Map Unit Description (MN)

Blue Earth County, Minnesota

27--Dickinson fine sandy loam, 0 to 2 percent slopes

Dickinson

Extent: 90 percent of the unit

Landform(s): outwash deltas

Slope gradient: 0 to 2 percent

Parent material: coarse-loamy outwash over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 11 in	fine sandy loam	moderately rapid	1.32 to 1.65 in	5.6 to 7.3
Bw -- 11 to 35 in	fine sandy loam	moderately rapid	2.88 to 3.60 in	5.1 to 6.5
C -- 35 to 60 in	fine sand	rapid	1.98 to 2.48 in	5.1 to 6.5

Wadena

Extent: 5 percent of the unit

Landform(s): outwash deltas

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

27--Dickinson fine sandy loam, 0 to 2 percent slopes

Darfur

Extent: 3 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Litchfield

Extent: 2 percent of the unit

Landform(s): outwash deltas

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

27B--Dickinson fine sandy loam, 2 to 6 percent slopes

Dickinson

Extent: 90 percent of the unit

Landform(s): outwash deltas

Slope gradient: 2 to 6 percent

Parent material: coarse-loamy outwash over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 11 in	fine sandy loam	moderately rapid	1.32 to 1.65 in	5.6 to 7.3
Bw -- 11 to 35 in	fine sandy loam	moderately rapid	2.88 to 3.60 in	5.1 to 6.5
C -- 35 to 60 in	fine sand	rapid	1.98 to 2.48 in	5.1 to 6.5

Wadena

Extent: 5 percent of the unit

Landform(s): outwash deltas

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

27B--Dickinson fine sandy loam, 2 to 6 percent slopes

Darfur

Extent: 3 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Litchfield

Extent: 2 percent of the unit

Landform(s): outwash deltas

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

35--Blue Earth mucky silt loam

Blue Earth

Extent: 85 percent of the unit

Landform(s): depressions on relict lakebeds

Slope gradient: 0 to 1 percent

Parent material: fine-silty coprogenic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .37

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Lco1 -- 0 to 19 in	mucky silt loam	moderate	3.40 to 4.54 in	7.4 to 8.4
Lco2 -- 19 to 48 in	mucky silt loam	moderate	5.24 to 6.99 in	7.4 to 8.4
Lco3 -- 48 to 60 in	clay loam	moderate	1.65 to 1.89 in	7.4 to 8.4

Canisteo

Extent: 10 percent of the unit

Landform(s): rims

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

35--Blue Earth mucky silt loam

Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

39--Wadena loam, 0 to 2 percent slopes

Wadena

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 0 to 2 percent

Parent material: fine-loamy outwash over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	loam	moderate	2.83 to 3.12 in	6.1 to 7.3
Bw -- 14 to 33 in	loam	moderate	2.65 to 3.59 in	5.6 to 7.3
2C -- 33 to 60 in	gravelly coarse sand	very rapid	0.54 to 1.07 in	6.6 to 8.4

Estherville

Extent: 5 percent of the unit

Landform(s): terraces

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

39B--Wadena loam, 2 to 6 percent slopes

Wadena

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 2 to 6 percent

Parent material: fine-loamy outwash over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	loam	moderate	2.83 to 3.12 in	6.1 to 7.3
Bw -- 14 to 33 in	loam	moderate	2.65 to 3.59 in	5.6 to 7.3
2C -- 33 to 60 in	gravelly coarse sand	very rapid	0.54 to 1.07 in	6.6 to 8.4

Estherville

Extent: 5 percent of the unit

Landform(s): terraces

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

41--Estherville sandy loam, 0 to 2 percent slopes

Estherville

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 0 to 2 percent

Parent material: coarse-loamy outwash over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	sandy loam	moderately rapid	1.84 to 2.55 in	5.6 to 7.3
Bw -- 14 to 22 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
2C -- 22 to 60 in	gravelly coarse sand	rapid	0.76 to 1.51 in	6.6 to 8.4

Wadena

Extent: 5 percent of the unit

Landform(s): terraces

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

41--Estherville sandy loam, 0 to 2 percent slopes

Dickenson

Extent: 2 percent of the unit

Landform(s): terraces

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

41B--Estherville sandy loam, 2 to 6 percent slopes

Estherville

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 2 to 6 percent

Parent material: coarse-loamy outwash over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	sandy loam	moderately rapid	1.84 to 2.55 in	5.6 to 7.3
Bw -- 14 to 22 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
2C -- 22 to 60 in	gravelly coarse sand	rapid	0.76 to 1.51 in	6.6 to 8.4

Wadena

Extent: 5 percent of the unit

Landform(s): terraces

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

41B--Estherville sandy loam, 2 to 6 percent slopes

Dickenson

Extent: 2 percent of the unit

Landform(s): terraces

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

41C--Estherville sandy loam, 6 to 18 percent slopes

Estherville

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 6 to 8 percent

Parent material: coarse-loamy outwash over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	sandy loam	moderately rapid	1.84 to 2.55 in	5.6 to 7.3
Bw -- 14 to 22 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
2C -- 22 to 60 in	gravelly coarse sand	rapid	0.76 to 1.51 in	6.6 to 8.4

Wadena

Extent: 5 percent of the unit

Landform(s): terraces

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

41C--Estherville sandy loam, 6 to 18 percent slopes

Dickenson

Extent: 5 percent of the unit

Landform(s): terraces

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

62--Barrington silt loam, 1 to 3 percent slopes

Barrington

Extent: 90 percent of the unit

Landform(s): rises on lake plains

Slope gradient: 1 to 3 percent

Parent material: fine-silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	silt loam	moderate	3.29 to 3.89 in	5.6 to 7.3
Bw -- 15 to 33 in	silt loam	moderate	3.26 to 3.62 in	5.6 to 7.8
C -- 33 to 60 in	stratified loamy very fine sand to silt loam	moderate	1.87 to 2.94 in	6.1 to 8.4

Madelia

Extent: 5 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

62--Barrington silt loam, 1 to 3 percent slopes

Grays

Extent: 5 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

69--Fedji loamy fine sand, 1 to 3 percent slopes

Fedji

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 1 to 3 percent

Parent material: sandy outwash over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated: 3s

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 10 in	loamy fine sand	rapid	0.98 to 1.28 in	5.6 to 6.5
Bw --	10 to 24 in	loamy fine sand	rapid	1.28 to 1.56 in	6.1 to 7.3
2Bw --	24 to 39 in	loam	moderate	2.54 to 2.84 in	6.1 to 7.3
2C --	39 to 60 in	loam	moderate	3.55 to 3.96 in	7.4 to 8.4

Darfur

Extent: 5 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

69--Fedji loamy fine sand, 1 to 3 percent slopes

Litchfield

Extent: 5 percent of the unit

Landform(s): outwash plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

69B--Fedji loamy fine sand, 3 to 8 percent slopes

Fedji

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 3 to 8 percent

Parent material: sandy outwash over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated: 3s

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 10 in	loamy fine sand	rapid	0.98 to 1.28 in	5.6 to 6.5
B --	10 to 24 in	loamy fine sand	rapid	1.28 to 1.56 in	6.1 to 7.3
2Bw --	24 to 39 in	loam	moderate	2.54 to 2.84 in	6.1 to 7.3
2C --	39 to 60 in	loam	moderate	3.55 to 3.96 in	7.4 to 8.4

Dickinson

Extent: 5 percent of the unit

Landform(s): deltas

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

69B--Fedji loamy fine sand, 3 to 8 percent slopes

Litchfield

Extent: 3 percent of the unit

Landform(s): deltas

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Darfur

Extent: 2 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

84--Brownton silty clay loam

Brownton

Extent: 90 percent of the unit

Landform(s): rims on depressions, flats on moraines

Slope gradient: 0 to 2 percent

Parent material: clayey lacustrine deposits over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 22 in	silty clay loam	slow	3.97 to 4.85 in	7.4 to 8.4
Bg -- 22 to 38 in	silty clay	slow	2.05 to 2.52 in	7.4 to 8.4
Cg -- 38 to 60 in	clay loam	moderate	3.09 to 3.53 in	7.4 to 8.4

Marna

Extent: 5 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

84--Brownton silty clay loam

Lura

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Guckeen

Extent: 2 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

85--Calco silty clay loam

Calco, occasionally flooded

Extent: 90 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: fine-silty alluvium

Restrictive feature(s): greater than 60 inches

Flooding: occasional

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 48 in	silty clay loam	moderate	10.09 to 11.05 in	7.4 to 8.4
Cg -- 48 to 60 in	silty clay loam	moderate	2.13 to 2.36 in	7.4 to 8.4

Comfrey

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

86--Canisteo silty clay loam

Canisteo

Extent: 90 percent of the unit

Landform(s): rims on depressions, flats on moraines

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	silty clay loam	moderate	2.55 to 3.12 in	7.4 to 8.4
Bkg -- 14 to 27 in	clay loam	moderate	1.89 to 2.39 in	7.4 to 8.4
Cg -- 27 to 60 in	loam	moderate	4.63 to 5.29 in	7.4 to 8.4

Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

86--Canisteo silty clay loam

Webster

Extent: 3 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Nicollet

Extent: 2 percent of the unit

Landform(s): rises

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

94--Terril loam, 0 to 2 percent slopes

Terril

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 0 to 2 percent

Parent material: fine-loamy colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 21 in	loam	moderate	4.17 to 4.59 in	6.1 to 7.3
Bw -- 21 to 49 in	loam	moderate	4.75 to 5.31 in	6.1 to 7.3
C -- 49 to 60 in	loam	moderate	1.76 to 1.98 in	6.1 to 7.8

Hamel

Extent: 4 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

94--Terril loam, 0 to 2 percent slopes

Webster

Extent: 2 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Le Sueur

Extent: 2 percent of the unit

Landform(s): rises

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

94--Terril loam, 0 to 2 percent slopes

Nicollet

Extent: 2 percent of the unit

Landform(s): rises

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

94B--Terril loam, 2 to 6 percent slopes

Terril

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: fine-loamy colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 21 in	loam	moderate	4.17 to 4.59 in	6.1 to 7.3
Bw -- 21 to 49 in	loam	moderate	4.75 to 5.31 in	6.1 to 7.3
C -- 49 to 60 in	loam	moderate	1.76 to 1.98 in	6.1 to 7.8

Hamel

Extent: 4 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

94B--Terril loam, 2 to 6 percent slopes

Le Sueur

Extent: 2 percent of the unit

Landform(s): rises

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Webster

Extent: 2 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

94B--Terril loam, 2 to 6 percent slopes

Nicollet

Extent: 2 percent of the unit

Landform(s): rises

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

94C--Terril loam, 6 to 15 percent slopes

Terril

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 15 percent

Parent material: fine-loamy colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 21 in	loam	moderate	4.17 to 4.59 in	6.1 to 7.3
Bw -- 21 to 49 in	loam	moderate	4.75 to 5.31 in	6.1 to 7.3
C -- 49 to 60 in	loam	moderate	1.76 to 1.98 in	6.1 to 7.8

Hamel

Extent: 5 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

94C--Terril loam, 6 to 15 percent slopes

Le Sueur

Extent: 2 percent of the unit

Landform(s): rises

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Webster

Extent: 2 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

94C--Terril loam, 6 to 15 percent slopes

Nicollet

Extent: 1 percent of the unit

Landform(s): rises

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

96--Collinwood silty clay loam, 1 to 3 percent slopes

Collinwood

Extent: 90 percent of the unit

Landform(s): rises on lake plains

Slope gradient: 1 to 3 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 17 in	silty clay loam	moderately slow	2.37 to 2.88 in	5.6 to 7.3
Bw -- 17 to 45 in	silty clay	moderately slow	3.63 to 4.47 in	5.6 to 7.3
C -- 45 to 60 in	silt loam	moderately slow	1.65 to 2.24 in	7.4 to 8.4

Lura

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

96--Collinwood silty clay loam, 1 to 3 percent slopes

Barbert

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Waldorf

Extent: 2 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

96B--Collinwood silty clay loam, 2 to 6 percent slopes

Collinwood

Extent: 90 percent of the unit

Landform(s): hills on lake plains

Slope gradient: 2 to 6 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 17 in	silty clay loam	moderately slow	2.37 to 2.88 in	5.6 to 7.3
Bw -- 17 to 45 in	silty clay	moderately slow	3.63 to 4.47 in	5.6 to 7.3
C -- 45 to 60 in	silt loam	moderately slow	1.65 to 2.24 in	7.4 to 8.4

Waldorf

Extent: 10 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

96C--Collinwood silty clay loam, 6 to 12 percent slopes

Collinwood

Extent: 90 percent of the unit

Landform(s): hills on lake plains

Slope gradient: 6 to 12 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 17 in	silty clay loam	moderately slow	2.37 to 2.88 in	5.6 to 7.3
Bw -- 17 to 45 in	silty clay	moderately slow	3.63 to 4.47 in	5.6 to 7.3
C -- 45 to 60 in	silt loam	moderately slow	1.65 to 2.24 in	7.4 to 8.4

Waldorf

Extent: 10 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

96D--Collinwood silty clay loam, 12 to 18 percent slopes

Collinwood

Extent: 90 percent of the unit

Landform(s): hills on lake plains

Slope gradient: 12 to 18 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 17 in	silty clay loam	moderately slow	2.37 to 2.88 in	5.6 to 7.3
Bw -- 17 to 45 in	silty clay	moderately slow	3.63 to 4.47 in	5.6 to 7.3
C -- 45 to 60 in	silt loam	moderately slow	1.65 to 2.24 in	7.4 to 8.4

Truman

Extent: 5 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

96D--Collinwood silty clay loam, 12 to 18 percent slopes

Bold

Extent: 5 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

100--Copaston loam, 1 to 4 percent slopes

Copaston

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 1 to 4 percent

Parent material: fine-loamy till over limestone bedrock

Restrictive feature(s): lithic bedrock at 12 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	5.6 to 7.3
Bw -- 10 to 19 in	sandy loam	moderately rapid	1.09 to 1.27 in	5.6 to 7.8
2R -- 19 to 23 in	unweathered bedrock	moderate		

Joliet

Extent: 10 percent of the unit

Landform(s): swales

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

101B--Truman silt loam, 2 to 6 percent slopes

Truman

Extent: 90 percent of the unit

Landform(s): hills on lake plains

Slope gradient: 2 to 6 percent

Parent material: fine-silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	silt loam	moderate	2.83 to 3.26 in	5.6 to 7.3
Bw -- 14 to 36 in	silt loam	moderate	3.90 to 4.55 in	5.6 to 7.8
C -- 36 to 60 in	silt loam	moderate	4.32 to 4.80 in	7.4 to 8.4

Kingston

Extent: 5 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

101B--Truman silt loam, 2 to 6 percent slopes

Madelia

Extent: 5 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

101C--Truman silt loam, 6 to 12 percent slopes

Truman

Extent: 90 percent of the unit

Landform(s): hills on lake plains

Slope gradient: 6 to 12 percent

Parent material: fine-silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	silt loam	moderate	2.83 to 3.26 in	5.6 to 7.3
Bw -- 14 to 36 in	silt loam	moderate	3.90 to 4.55 in	5.6 to 7.8
C -- 36 to 60 in	silt loam	moderate	4.32 to 4.80 in	7.4 to 8.4

Kingston

Extent: 5 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

101C--Truman silt loam, 6 to 12 percent slopes

Madelia

Extent: 5 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

102B--Clarion loam, 2 to 6 percent slopes

Clarion

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 14 in	loam	moderate	2.83 to 3.12 in	5.6 to 7.3
Bw --	14 to 34 in	loam	moderate	3.35 to 3.74 in	5.6 to 7.8
C --	34 to 60 in	loam	moderate	4.42 to 4.94 in	7.4 to 8.4

Nicollet

Extent: 4 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

102B--Clarion loam, 2 to 6 percent slopes

Glencoe

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Webster

Extent: 3 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

102C--Clarion loam, 6 to 12 percent slopes

Clarion

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	loam	moderate	2.83 to 3.12 in	5.6 to 7.3
Bw -- 14 to 34 in	loam	moderate	3.35 to 3.74 in	5.6 to 7.8
C -- 34 to 60 in	loam	moderate	4.42 to 4.94 in	7.4 to 8.4

Nicollet

Extent: 4 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

102C--Clarion loam, 6 to 12 percent slopes

Glencoe

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Webster

Extent: 3 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

102D--Clarion loam, 12 to 18 percent slopes

Clarion

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	loam	moderate	2.83 to 3.12 in	5.6 to 7.3
Bw -- 14 to 34 in	loam	moderate	3.35 to 3.74 in	5.6 to 7.8
C -- 34 to 60 in	loam	moderate	4.42 to 4.94 in	7.4 to 8.4

Nicollet

Extent: 3 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

102D--Clarion loam, 12 to 18 percent slopes

Webster

Extent: 3 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Glencoe

Extent: 2 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

102D--Clarion loam, 12 to 18 percent slopes

Terril

Extent: 2 percent of the unit

Landform(s): till plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

105B--Kamrar silty clay, 2 to 6 percent slopes

Kamrar

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: clayey lacustrine deposits over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 16 in	silty clay	moderately slow	2.42 to 3.07 in	5.6 to 7.3
Bw -- 16 to 31 in	silty clay	moderately slow	2.24 to 2.84 in	5.6 to 7.3
C -- 31 to 60 in	loam	moderate	4.02 to 4.60 in	7.4 to 8.4

Guckeen

Extent: 5 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

105B--Kamrar silty clay, 2 to 6 percent slopes

Marna

Extent: 5 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

105C--Kamrar silty clay, 6 to 12 percent slopes

Extent: percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s):

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil:

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

105D--Kamrar silty clay, 12 to 18 percent slopes

Kamrar

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: clayey lacustrine deposits over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 16 in	silty clay	moderately slow	2.42 to 3.07 in	5.6 to 7.3
Bw -- 16 to 31 in	silty clay	moderately slow	2.24 to 2.84 in	5.6 to 7.3
C -- 31 to 60 in	loam	moderate	4.02 to 4.60 in	7.4 to 8.4

Storden

Extent: 5 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

105D--Kamrar silty clay, 12 to 18 percent slopes

Terril

Extent: 5 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

106B--Lester loam, 2 to 6 percent slopes

Lester

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	loam	moderate	2.99 to 3.29 in	5.6 to 7.3
Bt -- 15 to 48 in	clay loam	moderate	4.96 to 6.28 in	5.6 to 7.3
C -- 48 to 60 in	loam	moderate	1.65 to 2.13 in	7.4 to 7.8

Le Sueur

Extent: 5 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

106B--Lester loam, 2 to 6 percent slopes

Cordova

Extent: 5 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

106C--Lester loam, 6 to 12 percent slopes

Lester

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	loam	moderate	2.99 to 3.29 in	5.6 to 7.3
Bt -- 15 to 48 in	clay loam	moderate	4.96 to 6.28 in	5.6 to 7.3
C -- 48 to 60 in	loam	moderate	1.65 to 2.13 in	7.4 to 7.8

Hamel

Extent: 4 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

106C--Lester loam, 6 to 12 percent slopes

Le Sueur

Extent: 3 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Cordova

Extent: 3 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

106D--Lester loam, 12 to 18 percent slopes

Lester

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	loam	moderate	2.99 to 3.29 in	5.6 to 7.3
Bt -- 15 to 48 in	clay loam	moderate	4.96 to 6.28 in	5.6 to 7.3
C -- 48 to 60 in	loam	moderate	1.65 to 2.13 in	7.4 to 7.8

Hamel

Extent: 4 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

106D--Lester loam, 12 to 18 percent slopes

Le Sueur

Extent: 3 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Cordova

Extent: 3 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

106E--Lester loam, 18 to 24 percent slopes

Lester

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 24 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 15 in	loam	moderate	2.99 to 3.29 in	5.6 to 7.3
Bt -- 15 to 48 in	clay loam	moderate	4.96 to 6.28 in	5.6 to 7.3
C -- 48 to 60 in	loam	moderate	1.65 to 2.13 in	7.4 to 7.8

Storden

Extent: 4 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

106E--Lester loam, 18 to 24 percent slopes

Terril

Extent: 3 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Hamel

Extent: 3 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

109--Cordova clay loam

Cordova

Extent: 90 percent of the unit

Landform(s): flats on moraines

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 13 in	clay loam	moderately slow	2.34 to 2.86 in	6.1 to 7.3
Btg -- 13 to 32 in	clay loam	moderately slow	2.83 to 3.59 in	5.1 to 6.5
Cg -- 32 to 60 in	loam	moderate	3.91 to 4.47 in	7.4 to 8.4

Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

109--Cordova clay loam

Rolfe

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Canisteo

Extent: 2 percent of the unit

Landform(s): rims

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

110--Marna silty clay loam

Marna

Extent: 90 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: clayey lacustrine deposits over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 20 in silty clay loam	slow	3.61 to 4.42 in	6.1 to 7.3
Bg --	20 to 32 in clay	slow	1.54 to 1.89 in	6.1 to 7.3
Cg --	32 to 60 in loam	moderate	3.91 to 5.31 in	6.6 to 8.4

Lura

Extent: 10 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

113--Webster silty clay loam

Webster

Extent: 90 percent of the unit

Landform(s): flats on moraines

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 20 in	silty clay loam	moderate	3.81 to 4.22 in	6.6 to 7.3
Bg -- 20 to 30 in	clay loam	moderate	1.57 to 1.77 in	6.6 to 7.8
Cg -- 30 to 60 in	loam	moderate	4.19 to 5.69 in	7.4 to 8.4

Canisteo

Extent: 5 percent of the unit

Landform(s): rims

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

113--Webster silty clay loam

Rolfe

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

114--Glencoe silty clay loam

Glencoe

Extent: 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: fine-loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 26 in	silty clay loam	moderate	4.68 to 5.72 in	6.1 to 7.8
Bg -- 26 to 38 in	silty clay loam	moderate	2.13 to 2.60 in	6.1 to 7.8
Cg -- 38 to 60 in	silty clay loam	moderate	3.31 to 4.19 in	6.6 to 7.8

Canisteo

Extent: 10 percent of the unit

Landform(s): rims

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

114--Glencoe silty clay loam

Webster

Extent: 5 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

128--Grogan silt loam, 1 to 3 percent slopes

Grogan

Extent: 90 percent of the unit

Landform(s): rises on outwash deltas

Slope gradient: 1 to 3 percent

Parent material: stratified sandy and silty glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: A

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 13 in	silt loam	moderately rapid	2.86 to 3.12 in	5.6 to 7.3
Bw -- 13 to 31 in	loam	moderately rapid	3.08 to 3.44 in	6.1 to 7.8
C -- 31 to 60 in	stratified loamy very fine sand to very fine sandy loam	moderately rapid	4.89 to 5.46 in	7.4 to 8.4

Litchfield

Extent: 4 percent of the unit

Landform(s): rises

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

128--Grogan silt loam, 1 to 3 percent slopes

Madelia

Extent: 3 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Nicollet

Extent: 3 percent of the unit

Landform(s): rises

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

128B--Grogan silt loam, 3 to 6 percent slopes

Grogan

Extent: 90 percent of the unit

Landform(s): hills on outwash deltas

Slope gradient: 3 to 6 percent

Parent material: stratified sandy and silty glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .43

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: A

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 13 in	silt loam	moderately rapid	2.86 to 3.12 in	5.6 to 7.3
Bw --	13 to 31 in	loam	moderately rapid	3.08 to 3.44 in	6.1 to 7.8
C --	31 to 60 in	stratified loamy very fine sand to very fine sandy loam	moderately rapid	4.89 to 5.46 in	7.4 to 8.4

Litchfield

Extent: 4 percent of the unit

Landform(s): rises

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

128B--Grogan silt loam, 3 to 6 percent slopes

Madelia

Extent: 3 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Nicollet

Extent: 3 percent of the unit

Landform(s): rises

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

130--Nicollet clay loam, 1 to 3 percent slopes

Nicollet

Extent: 90 percent of the unit

Landform(s): rises on moraines

Slope gradient: 1 to 3 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 21 in	clay loam	moderate	3.55 to 4.59 in	5.6 to 7.3
Bw -- 21 to 44 in	clay loam	moderate	3.48 to 4.41 in	5.6 to 7.8
C -- 44 to 60 in	loam	moderate	2.20 to 2.99 in	7.4 to 8.4

Clarion

Extent: 4 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

130--Nicollet clay loam, 1 to 3 percent slopes

Webster

Extent: 3 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Glencoe

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

134--Okoboji silty clay loam

Okoboji

Extent: 85 percent of the unit

Landform(s): depressions on lake plains

Slope gradient: 0 to 1 percent

Parent material: fine-silty alluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silty clay loam	moderately slow	1.65 to 1.81 in	6.1 to 7.8
A -- 8 to 40 in	silty clay loam	moderately slow	5.81 to 6.46 in	6.6 to 7.8
Cg -- 40 to 60 in	silt loam	moderately slow	3.54 to 3.94 in	6.6 to 8.4

Madelia

Extent: 10 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

134--Okoboji silty clay loam

Lura

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

136--Madelia silty clay loam

Madelia

Extent: 90 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: fine-silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 19 in	silty clay loam	moderate	3.40 to 4.54 in	6.1 to 7.3
Bg -- 19 to 37 in	silty clay loam	moderate	2.90 to 3.98 in	6.6 to 7.8
Cg -- 37 to 60 in	silt loam	moderate	3.65 to 5.02 in	7.4 to 8.4

Kingston

Extent: 4 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

136--Madelia silty clay loam

Spicer

Extent: 3 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Okoboji

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

138B2--Lerdal silty clay loam, 2 to 6 percent slopes, eroded

Lerdal, eroded

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: clayey glaciolacustrine deposits over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 12 in	silty clay loam	moderate	2.13 to 2.60 in	5.6 to 6.5
Bt -- 12 to 34 in	silty clay	slow	2.87 to 4.19 in	4.5 to 6.0
C -- 34 to 60 in	clay loam	moderately slow	3.64 to 4.94 in	6.6 to 7.8

Kilkenny

Extent: 4 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

138B2--Lerdal silty clay loam, 2 to 6 percent slopes, eroded

Minnetonka

Extent: 3 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Glencoe

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

138C2--Lerdal silty clay loam, 6 to 15 percent slopes, eroded

Lerdal, eroded

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 15 percent

Parent material: clayey glaciolacustrine deposits over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 12 in	silty clay loam	moderate	2.13 to 2.60 in	5.6 to 6.5
Bt -- 12 to 34 in	silty clay	slow	2.87 to 4.19 in	4.5 to 6.0
C -- 34 to 60 in	clay loam	moderately slow	3.64 to 4.94 in	6.6 to 7.8

Kilkenny

Extent: 4 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

138C2--Lerdal silty clay loam, 6 to 15 percent slopes, eroded

Minnetonka

Extent: 3 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Glencoe

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

140--Spicer silty clay loam

Spicer

Extent: 90 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: fine-silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 16 in	silty clay loam	moderate	2.91 to 3.87 in	7.4 to 8.4
Bg -- 16 to 40 in	silt loam	moderate	3.84 to 5.28 in	7.4 to 8.4
Cg -- 40 to 60 in	silt loam	moderate	3.15 to 4.33 in	7.4 to 8.4

Okoboji

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

140--Spicer silty clay loam

Madelia

Extent: 5 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

160--Fieldon loam

Fieldon

Extent: 90 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 1 percent

Parent material: coarse-loamy outwash over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 19 in	loam	moderate	3.40 to 3.78 in	7.4 to 8.4
Bg -- 19 to 37 in	fine sandy loam	moderate	2.72 to 3.08 in	7.4 to 8.4
2Cg -- 37 to 60 in	stratified fine sand to loamy fine sand	rapid	1.14 to 1.60 in	7.4 to 8.4

Dassel

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

178--Granby fine sandy loam

Granby

Extent: 90 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: coarse-loamy outwash over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated: 4w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 18 in	fine sandy loam	moderately rapid	2.90 to 3.26 in	5.6 to 7.3
2Bg -- 18 to 42 in	loamy fine sand	rapid	1.20 to 2.88 in	5.6 to 7.8
2Cg -- 42 to 60 in	fine sand	rapid	0.89 to 1.59 in	6.6 to 8.4

Dassel

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

178--Granby fine sandy loam

Fieldon

Extent: 3 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

181--Litchfield loamy fine sand, 1 to 3 percent slopes

Litchfield

Extent: 90 percent of the unit

Landform(s): outwash plains

Slope gradient: 1 to 3 percent

Parent material: sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated: 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 16 in	loamy fine sand	rapid	1.61 to 1.94 in	5.1 to 7.3
Bw1 --	16 to 48 in	loamy fine sand	moderately rapid	2.23 to 5.10 in	5.1 to 7.3
Bw2 --	48 to 52 in	fine sandy loam	moderately rapid	0.59 to 0.67 in	6.6 to 7.8
C --	52 to 60 in	fine sand	rapid	0.63 to 0.79 in	6.1 to 7.8

Dickinson

Extent: 3 percent of the unit

Landform(s): outwash plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

181--Litchfield loamy fine sand, 1 to 3 percent slopes

Estherville

Extent: 3 percent of the unit

Landform(s): outwash plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

183--Dassel loam

Dassel

Extent: 85 percent of the unit

Landform(s): depressions on outwash plains

Slope gradient: 0 to 1 percent

Parent material: coarse-loamy outwash over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 24 in	loam	moderately rapid	4.32 to 5.76 in	5.6 to 7.3
Bg -- 24 to 38 in	stratified fine sand to loam	moderately rapid	1.70 to 2.41 in	5.6 to 7.3
2Cg -- 38 to 60 in	fine sand	rapid	1.73 to 2.17 in	6.1 to 7.8

Fieldon

Extent: 5 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

196--Joliet silty clay loam

Joliet

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 0 to 2 percent

Parent material: fine-silty lacustrine deposits over limestone bedrock

Restrictive feature(s): lithic bedrock at 10 to 20 inches

Flooding: frequent

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated: 4w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 17 in	silty clay loam	moderate	2.54 to 3.89 in	6.1 to 8.4
2R -- 17 to 60 in	unweathered bedrock	moderate		

Tilfer

Extent: 10 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

197--Kingston silty clay loam, 1 to 3 percent slopes

Kingston

Extent: 90 percent of the unit

Landform(s): lake plains

Slope gradient: 1 to 3 percent

Parent material: fine-silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 17 in	silty clay loam	moderate	3.05 to 4.06 in	5.6 to 7.3
Bw -- 17 to 31 in	silty clay loam	moderate	2.27 to 2.83 in	5.6 to 7.8
C -- 31 to 60 in	silt loam	moderate	4.60 to 5.75 in	7.4 to 8.4

Madelia

Extent: 5 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

197--Kingston silty clay loam, 1 to 3 percent slopes

Truman

Extent: 5 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

211--Lura silty clay

Lura

Extent: 85 percent of the unit

Landform(s): depressions on lake plains

Slope gradient: 0 to 2 percent

Parent material: clayey alluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silty clay	slow	1.38 to 1.67 in	6.1 to 7.8
A -- 10 to 58 in	clay	slow	6.72 to 8.17 in	6.1 to 7.3
Cg -- 58 to 60 in	silty clay	moderately slow	0.22 to 0.37 in	6.6 to 7.8

Marna

Extent: 5 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

211--Lura silty clay

Barbert

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Minnetonka

Extent: 5 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

219--Rolfe silt loam

Rolfe

Extent: 85 percent of the unit

Landform(s): depressions on till plains

Slope gradient: 0 to 1 percent

Parent material: clayey alluvium over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 7 in	silt loam		moderate	1.56 to 1.70 in	5.1 to 7.3
E --	7 to 17 in	silt loam		moderate	2.17 to 2.36 in	5.1 to 7.3
Btg --	17 to 43 in	clay		slow	2.86 to 3.38 in	6.1 to 7.3
Cg --	43 to 60 in	silty clay loam		moderate	2.37 to 2.71 in	6.1 to 8.4

Cordova

Extent: 5 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

219--Rolfe silt loam

Minnetonka

Extent: 5 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

222B--Lasa fine sand, 2 to 8 percent slopes

Lasa

Extent: 90 percent of the unit

Landform(s): outwash deltas

Slope gradient: 2 to 8 percent

Parent material: sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 1

Wind erodibility index (WEI): 250

Kw factor (surface layer) .05

Land capability, nonirrigated: 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 22 in	fine sand	moderately rapid	1.76 to 2.20 in	5.6 to 7.3
Bw --	22 to 45 in	fine sand	moderately rapid	1.60 to 2.06 in	6.1 to 7.3
C --	45 to 60 in	fine sand	rapid	0.90 to 1.20 in	6.1 to 7.3

Dassel

Extent: 10 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

229--Waldorf silty clay loam

Waldorf

Extent: 90 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 20 in	silty clay loam	moderately slow	3.61 to 5.02 in	6.1 to 7.3
Bg -- 20 to 45 in	silty clay	moderately slow	3.22 to 3.97 in	6.6 to 7.8
Cg -- 45 to 60 in	silty clay loam	moderate	2.99 to 3.29 in	7.4 to 8.4

Collinwood

Extent: 4 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

229--Waldorf silty clay loam

Kingston

Extent: 3 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Guckeen

Extent: 3 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

230--Guckeen silty clay loam, 1 to 4 percent slopes

Guckeen

Extent: 90 percent of the unit

Landform(s): rises on lake plains

Slope gradient: 1 to 4 percent

Parent material: clayey lacustrine deposits over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 22 in	silty clay loam	slow	3.53 to 4.19 in	5.6 to 7.3
Bw -- 22 to 31 in	silty clay	slow	1.18 to 1.45 in	5.6 to 7.3
C -- 31 to 60 in	loam	moderate	4.31 to 4.89 in	6.6 to 8.4

Kamrar

Extent: 5 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

230--Guckeen silty clay loam, 1 to 4 percent slopes

Marna

Extent: 5 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

238B--Kilkenny clay loam, 2 to 6 percent slopes

Kilkenny

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: clayey glaciolacustrine deposits over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 7 in	clay loam	moderately slow	1.20 to 1.35 in	5.6 to 6.5
Bt --	7 to 45 in	clay loam	moderately slow	5.67 to 7.18 in	4.5 to 6.5
C --	45 to 60 in	loam	moderate	2.09 to 2.39 in	5.6 to 7.8

Lerdal

Extent: 5 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

238B--Kilkenny clay loam, 2 to 6 percent slopes

Mazaska

Extent: 5 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

238C--Kilkenny clay loam, 6 to 12 percent slopes

Kilkenny

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: clayey glaciolacustrine deposits over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 7 in	clay loam	moderately slow	1.20 to 1.35 in	5.6 to 6.5
Bt -- 7 to 45 in	clay loam	moderately slow	5.67 to 7.18 in	4.5 to 6.5
C -- 45 to 60 in	loam	moderate	2.09 to 2.39 in	5.6 to 7.8

Lerdal

Extent: 4 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

238C--Kilkenny clay loam, 6 to 12 percent slopes

Derrynane

Extent: 3 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Terril

Extent: 3 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

238D--Kilkenny clay loam, 12 to 18 percent slopes

Kilkenny

Extent: 90 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: clayey glaciolacustrine deposits over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 7 in	clay loam	moderately slow	1.20 to 1.35 in	5.6 to 6.5
Bt --	7 to 45 in	clay loam	moderately slow	5.67 to 7.18 in	4.5 to 6.5
C --	45 to 60 in	loam	moderate	2.09 to 2.39 in	5.6 to 7.8

Lerdal

Extent: 4 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

238D--Kilkenny clay loam, 12 to 18 percent slopes

Derrynane

Extent: 3 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Terril

Extent: 3 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

239--Le Sueur clay loam, 1 to 3 percent slopes

Le Sueur

Extent: 90 percent of the unit

Landform(s): rises on moraines

Slope gradient: 1 to 3 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 13 in	clay loam	moderate	2.21 to 2.60 in	5.6 to 7.3
Bt -- 13 to 41 in	clay loam	moderate	4.19 to 5.31 in	5.1 to 7.3
C -- 41 to 60 in	loam	moderate	2.83 to 3.59 in	7.4 to 8.4

Cordova

Extent: 5 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

239--Le Sueur clay loam, 1 to 3 percent slopes

Lester

Extent: 5 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

248--Lomax loam, 1 to 3 percent slopes

Lomax

Extent: 90 percent of the unit

Landform(s): flood plains

Slope gradient: 1 to 3 percent

Parent material: coarse-loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .32

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 19 in	loam	moderately rapid	3.40 to 4.16 in	5.1 to 6.5
Bw1 -- 19 to 26 in	fine sandy loam	moderately rapid	0.85 to 1.35 in	5.1 to 6.5
Bw2 -- 26 to 60 in	fine sandy loam	moderately rapid	1.69 to 3.72 in	5.1 to 7.3

Minneopa

Extent: 4 percent of the unit

Landform(s): terraces

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

248--Lomax loam, 1 to 3 percent slopes

Dorchester

Extent: 4 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Comfrey

Extent: 2 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

259B--Grays silt loam, 2 to 8 percent slopes

Grays

Extent: 90 percent of the unit

Landform(s): hills on lake plains

Slope gradient: 2 to 8 percent

Parent material: fine-silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .43

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 8 in	silt loam		moderate	1.73 to 1.89 in	5.6 to 6.5
E --	8 to 14 in	silt loam		moderate	1.39 to 1.51 in	5.6 to 6.5
Bt --	14 to 40 in	silty clay loam		moderate	4.68 to 5.20 in	5.6 to 6.5
C --	40 to 60 in	silt loam		moderate	2.76 to 4.33 in	7.4 to 8.4

Madelia

Extent: 5 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

259B--Grays silt loam, 2 to 8 percent slopes

Barrington

Extent: 5 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

275B--Ocheyedan loam, 2 to 8 percent slopes

Ocheyedan

Extent: 90 percent of the unit

Landform(s): lake plains

Slope gradient: 2 to 8 percent

Parent material: loamy glaciolacustrine deposits over silty glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 15 in	loam	moderate	2.99 to 3.29 in	5.6 to 7.3
Bw --	15 to 34 in	loam	moderate	3.02 to 3.40 in	6.1 to 7.8
C --	34 to 60 in	silt loam	moderate	4.94 to 5.46 in	6.6 to 8.4

Clarion

Extent: 4 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

275B--Ocheyedan loam, 2 to 8 percent slopes

Webster

Extent: 3 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Nicollet

Extent: 3 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

281--Darfur loam

Darfur

Extent: 90 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: coarse-loamy outwash over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 19 in	loam	moderate	3.78 to 4.16 in	6.1 to 7.3
Bg -- 19 to 31 in	fine sandy loam	moderately rapid	1.83 to 2.07 in	6.6 to 7.8
Cg -- 31 to 60 in	stratified fine sand to loamy fine sand to fine sandy loam	moderately rapid	2.30 to 2.87 in	6.6 to 8.4

Dassel

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

286--Shorewood silty clay loam, 1 to 6 percent slopes

Shorewood

Extent: 90 percent of the unit

Landform(s): rises on lake plains

Slope gradient: 1 to 6 percent

Parent material: clayey lacustrine deposits over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 17 in	silty clay loam	moderately slow	3.05 to 3.72 in	5.6 to 7.3
Bt -- 17 to 39 in	silty clay	moderately slow	2.87 to 3.53 in	5.1 to 7.3
C -- 39 to 60 in	loam	moderate	2.92 to 3.34 in	6.6 to 7.8

Minnetonka

Extent: 5 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

286--Shorewood silty clay loam, 1 to 6 percent slopes

Guckeen

Extent: 5 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

287--Minnetonka silty clay loam

Minnetonka

Extent: 90 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: clayey lacustrine deposits over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 19 in	silty clay loam	moderately slow	3.40 to 4.16 in	5.6 to 7.3
Btg -- 19 to 40 in	silty clay	slow	2.76 to 4.04 in	5.6 to 7.3
Cg -- 40 to 60 in	loam	moderate	3.15 to 4.13 in	6.6 to 7.8

Shorewood

Extent: 4 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

287--Minnetonka silty clay loam

Lura

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Barbert

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

310--Beauford clay

Beauford

Extent: 90 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 18 in	clay	slow	2.35 to 2.90 in	6.6 to 7.3
Bg --	18 to 40 in	clay	slow	2.20 to 3.09 in	6.6 to 7.3
Cg --	40 to 60 in	clay	slow	1.77 to 2.56 in	7.4 to 7.8

Lura

Extent: 4 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

310--Beauford clay

Barbert

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Guckeen

Extent: 3 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

311--Shorewood silty clay, 1 to 6 percent slopes

Shorewood

Extent: 90 percent of the unit

Landform(s): rises on lake plains

Slope gradient: 1 to 6 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 17 in	silty clay	moderately slow	2.37 to 2.88 in	5.6 to 7.3
Bt -- 17 to 45 in	silty clay	moderately slow	3.63 to 4.47 in	5.1 to 7.3
2C -- 45 to 60 in	clay loam	moderate	2.09 to 2.39 in	6.6 to 7.8

Lura

Extent: 4 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

311--Shorewood silty clay, 1 to 6 percent slopes

Barbert

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Beauford

Extent: 3 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

316--Baroda silty clay loam

Baroda

Extent: 90 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 1 percent

Parent material: clayey lacustrine deposits over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	silty clay loam	moderate	2.55 to 3.12 in	5.1 to 7.3
Btg -- 14 to 46 in	clay	slow	4.15 to 5.10 in	4.5 to 6.0
2Cg -- 46 to 60 in	loam	moderate	1.93 to 2.20 in	7.9 to 8.4

Lura

Extent: 4 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

316--Baroda silty clay loam

Barbert

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Shorewood

Extent: 3 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

317--Oshawa silt loam

Oshawa, frequently flooded

Extent: 85 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 1 percent

Parent material: fine-loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated: 6w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 21 in	silt loam	moderate	4.17 to 4.59 in	7.4 to 7.8
Cg -- 21 to 60 in	stratified loamy sand to sandy loam to loam to silt loam	moderately slow	6.63 to 7.41 in	7.4 to 7.8

Chaska

Extent: 10 percent of the unit

Landform(s): terraces

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

317--Oshawa silt loam

Palms

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

319--Barbert silt loam

Barbert

Extent: 85 percent of the unit

Landform(s): depressions on lake plains

Slope gradient: 0 to 1 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 4 in	silt loam	moderate	0.87 to 0.94 in	5.1 to 6.5
E --	4 to 17 in	silt loam	moderate	2.86 to 3.12 in	5.1 to 6.5
Btg --	17 to 43 in	clay	slow	2.60 to 3.64 in	5.1 to 7.3
Cg --	43 to 60 in	silty clay loam	moderate	3.72 to 4.06 in	5.1 to 6.5

Lura

Extent: 10 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

319--Barbert silt loam

Minnetonka

Extent: 5 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

321--Tilfer silty clay loam

Tilfer

Extent: 90 percent of the unit

Landform(s): flats on benches

Slope gradient: 0 to 2 percent

Parent material: fine-silty lacustrine deposits over limestone bedrock

Restrictive feature(s): lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 22 in	silty clay loam	moderate	4.41 to 4.85 in	7.4 to 8.4
Bg --	22 to 31 in	silty clay loam	moderate	1.54 to 1.72 in	7.4 to 8.4
Cg --	31 to 33 in	channers	impermeable	0.00 to 0.00 in	
2R --	33 to 35 in	bedrock	impermeable	0.00 to 0.00 in	

Joliet

Extent: 10 percent of the unit

Landform(s): outwash plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

329--Chaska loam

Chaska, occasionally flooded

Extent: 90 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: occasional

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 8 in	loam	moderate	1.73 to 1.89 in	6.6 to 7.8
Cg1 --	8 to 38 in	stratified loamy fine sand to sandy loam to very fine sandy loam to loam	moderate	5.09 to 5.69 in	7.4 to 7.8
Cg2 --	38 to 60 in	stratified loamy fine sand to sandy loam	moderately rapid	1.54 to 3.53 in	7.4 to 8.4

Oshawa

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

329--Chaska loam

Dorchester

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

349--Calco silty clay loam, very wet

Calco, frequently flooded

Extent: 90 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 1 percent

Parent material: fine-silty alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 5w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 48 in	silty clay loam	moderate	10.09 to 11.05 in	7.4 to 8.4
Cg -- 48 to 60 in	silty clay loam	moderate	2.13 to 2.36 in	7.4 to 8.4

Minneopa

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

353--Comfrey clay loam, frequently flooded

Comfrey, frequently flooded

Extent: 90 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: fine-loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated: 6w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 16 in	clay loam	moderate	2.91 to 3.55 in	6.6 to 7.8
Cg1 -- 16 to 34 in	loam	moderate	2.83 to 3.54 in	6.6 to 7.8
Cg2 -- 34 to 60 in	loam	moderate	3.90 to 4.94 in	6.6 to 8.4

Oshawa

Extent: 4 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

353--Comfrey clay loam, frequently flooded

Chaska

Extent: 3 percent of the unit

Landform(s): terraces

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Caron

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

354--Dorchester loam, occasionally flooded

Dorchester, occasionally flooded

Extent: 90 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: occasional

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .37

Land capability, nonirrigated: 2w

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	7.4 to 8.4
C -- 10 to 46 in	stratified loamy fine sand to loam to silt loam	moderate	7.24 to 7.97 in	7.4 to 8.4
Ab -- 46 to 60 in	loam	moderate	3.03 to 3.31 in	6.6 to 8.4

Chaska

Extent: 5 percent of the unit

Landform(s): terraces

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

354--Dorchester loam, occasionally flooded

Comfrey

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class: poorly drained

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

360B--Lasa loamy fine sand, rock substratum, 1 to 6 percent slopes

Lasa, rock substratum

Extent: 90 percent of the unit

Landform(s): outwash deltas

Slope gradient: 1 to 6 percent

Parent material: sandy outwash

Restrictive feature(s): paralithic bedrock at 48 to 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated: 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 22 in	loamy fine sand	moderately rapid	2.20 to 2.65 in	5.6 to 7.3
Bw -- 22 to 48 in	loamy fine sand	moderately rapid	1.82 to 2.34 in	6.1 to 7.3
2R -- 48 to 60 in	unweathered bedrock	moderate		6.1 to 7.3

Joliet

Extent: 10 percent of the unit

Landform(s): outwash plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

360E--Lasa loamy fine sand, rock substratum, 12 to 35 percent slopes

Lasa, rock substratum

Extent: 90 percent of the unit

Landform(s): outwash deltas

Slope gradient: 12 to 35 percent

Parent material: sandy outwash

Restrictive feature(s): paralithic bedrock at 48 to 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 22 in	loamy fine sand	moderately rapid	1.76 to 2.20 in	5.6 to 7.3
Bw -- 22 to 45 in	fine sand	moderately rapid	1.60 to 2.06 in	6.1 to 7.3
2R -- 45 to 60 in	unweathered bedrock	moderate		6.1 to 7.3

Terril

Extent: 10 percent of the unit

Landform(s): outwash deltas

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

363--Minneopa loamy fine sand, occasionally flooded, 0 to 3 percent slopes

Minneopa, occasionally flooded

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 0 to 3 percent

Parent material: coarse-loamy outwash over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: occasional

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .17

Land capability, nonirrigated: 3s

Hydric soil: no

Hydrologic group: A/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	loamy fine sand	moderately rapid	1.94 to 2.24 in	5.6 to 7.3
Bw -- 15 to 20 in	sandy loam	moderately rapid	0.36 to 0.56 in	6.1 to 7.3
C -- 20 to 60 in	loamy sand	rapid	1.59 to 3.58 in	6.1 to 8.4

Comfrey

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

364--Minnetonka silty clay loam, silty substratum

Minnetonka, silty substratum

Extent: 90 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: fine-silty lacustrine deposits and/or clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 19 in	silty clay loam	moderately slow	3.40 to 4.16 in	5.6 to 7.3
Bt -- 19 to 40 in	silty clay	slow	2.76 to 4.04 in	5.6 to 7.3
C -- 40 to 60 in	silt loam	moderate	3.15 to 4.13 in	6.6 to 7.8

Shorewood

Extent: 4 percent of the unit

Landform(s): rises

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

364--Minnetonka silty clay loam, silty substratum

Lura

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Barbert

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

414--Hamel clay loam, 1 to 4 percent slopes

Hamel

Extent: 90 percent of the unit

Landform(s): drainageways on moraines

Slope gradient: 1 to 4 percent

Parent material: fine-loamy colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 28 in	clay loam	moderately slow	5.03 to 6.15 in	5.6 to 7.3
Bt -- 28 to 34 in	clay loam	moderately slow	0.94 to 1.12 in	5.6 to 7.3
C -- 34 to 60 in	loam	moderate	3.64 to 4.68 in	7.4 to 7.8

Glencoe

Extent: 10 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

440--Copaston loam, very shallow, 1 to 4 percent slopes

Copaston, very shallow

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 1 to 4 percent

Parent material: fine-loamy till over limestone bedrock

Restrictive feature(s): lithic bedrock at 12 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated: 4s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	5.6 to 7.3
Bw -- 8 to 12 in	sandy loam	moderately rapid	0.47 to 0.55 in	5.6 to 7.8
2R -- 12 to 16 in	unweathered bedrock	moderate		

Joliet

Extent: 10 percent of the unit

Landform(s): swales

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

448--Shorewood silty clay loam, silty substratum, 1 to 3 percent slopes

Shorewood, silty substratum

Extent: 90 percent of the unit

Landform(s): rises on lake plains

Slope gradient: 1 to 3 percent

Parent material: clayey lacustrine deposits over fine-silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 2s

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	silty clay loam	moderately slow	2.69 to 3.14 in	5.6 to 7.3
Bt -- 15 to 33 in	silty clay	slow	2.35 to 3.44 in	5.6 to 7.3
C -- 33 to 60 in	silt loam	moderate	4.82 to 5.62 in	6.6 to 7.8

Minnetonka

Extent: 4 percent of the unit

Landform(s): rises

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

448--Shorewood silty clay loam, silty substratum, 1 to 3 percent slopes

Lura

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Barbert

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

451--Dorchester loam, 1 to 3 percent slopes

Dorchester, rarely flooded

Extent: 90 percent of the unit

Landform(s): terraces

Slope gradient: 1 to 3 percent

Parent material: loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: rare

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .37

Land capability, nonirrigated: 2w

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	7.4 to 8.4
C -- 10 to 46 in	stratified loamy fine sand to loam to silt loam	moderate	7.24 to 7.97 in	7.4 to 8.4
Ab -- 46 to 60 in	loam	moderate	3.03 to 3.31 in	6.6 to 8.4

Comfrey

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

451--Dorchester loam, 1 to 3 percent slopes

Lomax

Extent: 5 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

524--Caron muck

Caron

Extent: 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: muck herbaceous organic material over
coprogenic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa --	0 to 8 in	muck	moderately rapid	2.36 to 3.15 in	
Oe --	8 to 35 in	mucky peat	rapid	10.87 to 13.58 in	
C --	35 to 60 in	coprogenous earth	moderately slow	4.96 to 5.46 in	

Palms

Extent: 15 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

525--Muskego muck

Muskego

Extent: 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 2 percent

Parent material: muck herbaceous organic material over
coprogenic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa --	0 to 32 in	muck	moderately rapid	11.16 to 14.35 in	
Loc --	32 to 60 in	coprogenous earth	slow	5.03 to 6.71 in	

Caron

Extent: 10 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

525--Muskego muck

Palms

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

539--Palms muck

Palms

Extent: 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 2 percent

Parent material: muck herbaceous organic material over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

Representative soil profile:

Texture

Permeability

Available water capacity

pH

Oa --	0 to 50 in	muck
2A --	50 to 60 in	silt loam

moderately rapid	17.50 to 24.00 in
moderate	1.77 to 2.17 in

Glencoe

Extent: 15 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

Available water capacity

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

548--Palms muck, sandy substratum

Palms, sandy substratum

Extent: 85 percent of the unit

Landform(s): depressions on outwash plains

Slope gradient: 0 to 2 percent

Parent material: muck herbaceous organic material over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa -- 0 to 30 in	muck	moderately rapid	10.47 to 13.46 in	
2A -- 30 to 45 in	silty clay loam	moderately rapid	1.94 to 2.99 in	
3A -- 45 to 60 in	fine sand	rapid	0.45 to 1.50 in	

Dassel

Extent: 15 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

851--Chaska-Urban land complex

Chaska, rarely flooded

Extent: 50 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: rare

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 8 in	loam	moderate	1.73 to 1.89 in	6.6 to 7.8
C1 --	8 to 38 in	stratified loamy fine sand to sandy loam to very fine sandy loam to loam	moderate	5.09 to 5.69 in	7.4 to 7.8
C2 --	38 to 60 in	stratified loamy fine sand to sandy loam	moderately rapid	1.54 to 3.53 in	7.4 to 8.4

Urban land, rarely flooded

Extent: 30 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding: rare

Ponding: none

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

851--Chaska-Urban land complex

Oshawa

Extent: 10 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Dorchester

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

852--Copaston-Urban land complex, 1 to 4 percent slopes

Copaston

Extent: 50 percent of the unit

Landform(s): terraces

Slope gradient: 1 to 4 percent

Parent material: fine-loamy till over limestone bedrock

Restrictive feature(s): lithic bedrock at 12 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated: 4s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	5.6 to 7.3
Bw -- 8 to 12 in	sandy loam	moderately rapid	0.47 to 0.55 in	5.6 to 7.8
2R -- 12 to 16 in	unweathered bedrock	moderate		

Urban land

Extent: 40 percent of the unit

Landform(s): terraces

Slope gradient: 1 to 4 percent

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

852--Copaston-Urban land complex, 1 to 4 percent slopes

Joliet

Extent: 10 percent of the unit

Landform(s): swales

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

853--Copaston-Urban land bouldery complex, 1 to 4 percent slopes

Copaston

Extent: 50 percent of the unit

Landform(s): terraces

Slope gradient: 1 to 4 percent

Parent material: fine-loamy till over limestone bedrock

Restrictive feature(s): lithic bedrock at 12 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	5.6 to 7.3
Bw -- 10 to 19 in	sandy loam	moderately rapid	1.09 to 1.27 in	5.6 to 7.8
2R -- 19 to 23 in	unweathered bedrock	moderate		

Urban land

Extent: 40 percent of the unit

Landform(s): terraces

Slope gradient: 1 to 4 percent

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

853--Copaston-Urban land bouldery complex, 1 to 4 percent slopes

Joliet

Extent: 10 percent of the unit

Landform(s): swales

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

854--Cordova-Urban land complex, 0 to 3 percent slopes

Cordova

Extent: 50 percent of the unit

Landform(s): drainageways on moraines

Slope gradient: 0 to 3 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 13 in	clay loam	moderately slow	2.34 to 2.86 in	6.1 to 7.3
Btg -- 13 to 32 in	clay loam	moderately slow	2.83 to 3.59 in	5.1 to 6.5
Cg -- 32 to 60 in	loam	moderate	3.91 to 4.47 in	7.4 to 8.4

Urban land

Extent: 30 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 3 percent

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

854--Cordova-Urban land complex, 0 to 3 percent slopes

Glencoe

Extent: 10 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Rolfe

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

854--Cordova-Urban land complex, 0 to 3 percent slopes

Le Sueur

Extent: 5 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

855--Dorchester-Urban land complex, 1 to 3 percent slopes

Dorchester, rarely flooded

Extent: 50 percent of the unit

Landform(s): flood plains

Slope gradient: 1 to 3 percent

Parent material: loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: rare

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .37

Land capability, nonirrigated: 2w

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	7.4 to 8.4
C -- 10 to 46 in	stratified loamy fine sand to loam to silt loam	moderate	7.24 to 7.97 in	7.4 to 8.4
Ab -- 46 to 60 in	loam	moderate	3.03 to 3.31 in	6.6 to 8.4

Urban land, rarely flooded

Extent: 30 percent of the unit

Landform(s): flood plains

Slope gradient: 1 to 3 percent

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding: rare

Ponding: none

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

855--Dorchester-Urban land complex, 1 to 3 percent slopes

Comfrey

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class: poorly drained

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Lomax

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

856B--Terril-Urban land complex, 2 to 6 percent slopes

Terril

Extent: 50 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 6 percent

Parent material: fine-loamy colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 21 in	loam	moderate	4.17 to 4.59 in	6.1 to 7.3
Bw -- 21 to 49 in	loam	moderate	4.75 to 5.31 in	6.1 to 7.3
C -- 49 to 60 in	loam	moderate	1.76 to 1.98 in	6.1 to 7.8

Urban land

Extent: 30 percent of the unit

Landform(s): moraines

Slope gradient: 2 to 6 percent

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

856B--Terril-Urban land complex, 2 to 6 percent slopes

Hamel

Extent: 10 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Le Sueur

Extent: 5 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

856B--Terril-Urban land complex, 2 to 6 percent slopes

Lester

Extent: 5 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

856C--Terril-Urban land complex, 6 to 15 percent slopes

Terril

Extent: 50 percent of the unit

Landform(s): moraines

Slope gradient: 6 to 15 percent

Parent material: fine-loamy colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 21 in	loam	moderate	4.17 to 4.59 in	6.1 to 7.3
Bw -- 21 to 49 in	loam	moderate	4.75 to 5.31 in	6.1 to 7.3
C -- 49 to 60 in	loam	moderate	1.76 to 1.98 in	6.1 to 7.8

Urban land

Extent: 30 percent of the unit

Landform(s): moraines

Slope gradient: 6 to 15 percent

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

856C--Terril-Urban land complex, 6 to 15 percent slopes

Hamel

Extent: 10 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Le Sueur

Extent: 5 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

856C--Terril-Urban land complex, 6 to 15 percent slopes

Lester

Extent: 5 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

909C--Bold-Truman silt loams, 6 to 12 percent slopes

Bold

Extent: 50 percent of the unit

Landform(s): hills on lake plains

Slope gradient: 6 to 12 percent

Parent material: coarse-silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .49

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 7 in	silt loam	moderate	1.49 to 1.70 in	7.4 to 8.4
C --	7 to 60 in	stratified loamy very fine sand to silt loam	moderate	10.55 to 12.66 in	7.4 to 8.4

Truman

Extent: 40 percent of the unit

Landform(s): hills on lake plains

Slope gradient: 6 to 12 percent

Parent material: fine-silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 14 in	silt loam	moderate	2.83 to 3.26 in	5.6 to 7.3
Bw --	14 to 36 in	silt loam	moderate	3.90 to 4.55 in	5.6 to 7.8
C --	36 to 60 in	silt loam	moderate	4.32 to 4.80 in	7.4 to 8.4

Map Unit Description (MN)

Blue Earth County, Minnesota

909C--Bold-Truman silt loams, 6 to 12 percent slopes

Kingston

Extent: 5 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Madelia

Extent: 5 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

909D--Bold-Truman silt loams, 12 to 18 percent slopes

Bold

Extent: 60 percent of the unit

Landform(s): hills on lake plains

Slope gradient: 12 to 18 percent

Parent material: coarse-silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .49

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 7 in	silt loam	moderate	1.49 to 1.70 in	7.4 to 8.4
C --	7 to 60 in	stratified loamy very fine sand to silt loam	moderate	10.55 to 12.66 in	7.4 to 8.4

Truman

Extent: 30 percent of the unit

Landform(s): hills on lake plains

Slope gradient: 12 to 18 percent

Parent material: fine-silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 14 in	silt loam	moderate	2.83 to 3.26 in	5.6 to 7.3
Bw --	14 to 36 in	silt loam	moderate	3.90 to 4.55 in	5.6 to 7.8
C --	36 to 60 in	silt loam	moderate	4.32 to 4.80 in	7.4 to 8.4

Map Unit Description (MN)

Blue Earth County, Minnesota

909D--Bold-Truman silt loams, 12 to 18 percent slopes

Kingston

Extent: 5 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Madelia

Extent: 5 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

919--Canisteo-Fieldon loams

Canisteo

Extent: 65 percent of the unit

Landform(s): flats on moraines

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	silty clay loam	moderate	2.55 to 3.12 in	7.4 to 8.4
Bkg -- 14 to 27 in	clay loam	moderate	1.89 to 2.39 in	7.4 to 8.4
C -- 27 to 60 in	loam	moderate	4.63 to 5.29 in	7.4 to 8.4

Fieldon

Extent: 25 percent of the unit

Landform(s): flats on moraines

Slope gradient: 0 to 1 percent

Parent material: coarse-loamy outwash over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 19 in	loam	moderate	3.40 to 3.78 in	7.4 to 8.4
Bg -- 19 to 37 in	fine sandy loam	moderate	2.72 to 3.08 in	7.4 to 8.4
C -- 37 to 60 in	stratified fine sand to loamy fine sand	rapid	1.14 to 1.60 in	7.4 to 8.4

Map Unit Description (MN)

Blue Earth County, Minnesota

919--Canisteo-Fieldon loams

Webster

Extent: 3 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Nicollet

Extent: 3 percent of the unit

Landform(s): rises

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

919--Canisteo-Fieldon loams

Litchfield

Extent: 2 percent of the unit

Landform(s): outwash deltas

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

920B--Clarion-Estherville complex, 2 to 6 percent slopes

Clarion

Extent: 65 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	loam	moderate	2.83 to 3.12 in	5.6 to 7.3
Bw -- 14 to 34 in	loam	moderate	3.35 to 3.74 in	5.6 to 7.8
C -- 34 to 60 in	loam	moderate	4.42 to 4.94 in	7.4 to 8.4

Estherville

Extent: 25 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: coarse-loamy outwash over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	sandy loam	moderately rapid	1.84 to 2.55 in	5.6 to 7.3
Bw -- 14 to 22 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
2C -- 22 to 60 in	gravelly coarse sand	rapid	0.76 to 1.51 in	6.6 to 8.4

Map Unit Description (MN)

Blue Earth County, Minnesota

920B--Clarion-Estherville complex, 2 to 6 percent slopes

Nicollet

Extent: 4 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Glencoe

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

920B--Clarion-Estherville complex, 2 to 6 percent slopes

Webster

Extent: 3 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

920C--Clarion-Estherville complex, 6 to 12 percent slopes

Clarion

Extent: 50 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 14 in	loam		moderate	2.83 to 3.12 in	5.6 to 7.3
Bw --	14 to 34 in	loam		moderate	3.35 to 3.74 in	5.6 to 7.8
C --	34 to 60 in	loam		moderate	4.42 to 4.94 in	7.4 to 8.4

Estherville

Extent: 30 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: coarse-loamy outwash over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 14 in	sandy loam		moderately rapid	1.84 to 2.55 in	5.6 to 7.3
Bw --	14 to 22 in	sandy loam		moderately rapid	1.02 to 1.42 in	5.6 to 7.3
2C --	22 to 60 in	gravelly coarse sand		rapid	0.76 to 1.51 in	6.6 to 8.4

Map Unit Description (MN)

Blue Earth County, Minnesota

920C--Clarion-Estherville complex, 6 to 12 percent slopes

Nicollet

Extent: 10 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Webster

Extent: 4 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

920C--Clarion-Estherville complex, 6 to 12 percent slopes

Glencoe

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Terril

Extent: 3 percent of the unit

Landform(s): till plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

920D--Clarion-Estherville complex, 12 to 20 percent slopes

Clarion

Extent: 55 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 14 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	loam	moderate	2.83 to 3.12 in	5.6 to 7.3
Bw -- 14 to 34 in	loam	moderate	3.35 to 3.74 in	5.6 to 7.8
C -- 34 to 60 in	loam	moderate	4.42 to 4.94 in	7.4 to 8.4

Estherville

Extent: 25 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 20 percent

Parent material: coarse-loamy outwash over sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	sandy loam	moderately rapid	1.84 to 2.55 in	5.6 to 7.3
Bw -- 14 to 22 in	sandy loam	moderately rapid	1.02 to 1.42 in	5.6 to 7.3
C -- 22 to 60 in	gravelly coarse sand	rapid	0.76 to 1.51 in	6.6 to 8.4

Map Unit Description (MN)

Blue Earth County, Minnesota

920D--Clarion-Estherville complex, 12 to 20 percent slopes

Nicollet

Extent: 5 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

920D--Clarion-Estherville complex, 12 to 20 percent slopes

Webster

Extent: 5 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Terril

Extent: 5 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

921C--Clarion-Storden loams, 6 to 12 percent slopes

Clarion

Extent: 55 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 9 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	loam	moderate	2.83 to 3.12 in	5.6 to 7.3
Bw -- 14 to 34 in	loam	moderate	3.35 to 3.74 in	5.6 to 7.8
C -- 34 to 60 in	loam	moderate	4.42 to 4.94 in	7.4 to 8.4

Storden

Extent: 35 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
C -- 8 to 60 in	loam	moderate	7.80 to 9.87 in	7.4 to 8.4

Map Unit Description (MN)

Blue Earth County, Minnesota

921C--Clarion-Storden loams, 6 to 12 percent slopes

Nicollet

Extent: 4 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Glencoe

Extent: 2 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

921C--Clarion-Storden loams, 6 to 12 percent slopes

Webster

Extent: 2 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Terril

Extent: 2 percent of the unit

Landform(s): till plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

921D--Clarion-Storden loams, 12 to 18 percent slopes

Clarion

Extent: 55 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 14 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	loam	moderate	2.83 to 3.12 in	5.6 to 7.3
Bw -- 14 to 34 in	loam	moderate	3.35 to 3.74 in	5.6 to 7.8
C -- 34 to 60 in	loam	moderate	4.42 to 4.94 in	7.4 to 8.4

Storden

Extent: 35 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated: 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
C -- 8 to 60 in	loam	moderate	7.80 to 9.87 in	7.4 to 8.4

Map Unit Description (MN)

Blue Earth County, Minnesota

921D--Clarion-Storden loams, 12 to 18 percent slopes

Nicollet

Extent: 4 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Glencoe

Extent: 2 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

921D--Clarion-Storden loams, 12 to 18 percent slopes

Webster

Extent: 2 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Terril

Extent: 2 percent of the unit

Landform(s): till plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

923--Copaston-Rock outcrop complex, 1 to 4 percent slopes

Copaston

Extent: 55 percent of the unit

Landform(s): terraces

Slope gradient: 1 to 4 percent

Parent material: fine-loamy till over limestone bedrock

Restrictive feature(s): lithic bedrock at 12 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated: 3s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	5.6 to 7.3
Bw -- 10 to 19 in	sandy loam	moderately rapid	1.09 to 1.27 in	5.6 to 7.8
2R -- 19 to 23 in	unweathered bedrock	rapid		

Rock outcrop

Extent: 35 percent of the unit

Landform(s): terraces

Slope gradient: 1 to 4 percent

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

926--Darfur-Webster loams

Darfur

Extent: 65 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: coarse-loamy outwash over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 19 in	loam	moderate	3.78 to 4.16 in	6.1 to 7.3
Bg --	19 to 31 in	fine sandy loam	moderately rapid	1.83 to 2.07 in	6.6 to 7.8
C --	31 to 60 in	stratified fine sand to loamy fine sand to fine sandy loam	moderately rapid	2.30 to 2.87 in	6.6 to 8.4

Webster

Extent: 25 percent of the unit

Landform(s): flats, outwash plains

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 20 in	loam	moderate	3.81 to 4.22 in	6.6 to 7.3
Bg --	20 to 30 in	clay loam	moderate	1.57 to 1.77 in	6.6 to 7.8
Cg --	30 to 60 in	loam	moderate	4.19 to 5.69 in	7.4 to 8.4

Map Unit Description (MN)

Blue Earth County, Minnesota

926--Darfur-Webster loams

Dassel

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Litchfield

Extent: 3 percent of the unit

Landform(s): outwash deltas

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

926--Darfur-Webster loams

Glencoe

Extent: 2 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

929--Fieldon-Canisteo loams

Fieldon

Extent: 65 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: coarse-loamy outwash over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 19 in	loam	moderate	3.40 to 3.78 in	7.4 to 8.4
Bg --	19 to 37 in	fine sandy loam	moderate	2.72 to 3.08 in	7.4 to 8.4
Cg --	37 to 60 in	stratified fine sand to loamy fine sand	rapid	1.14 to 1.60 in	7.4 to 8.4

Canisteo

Extent: 25 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 14 in	loam	moderate	2.55 to 3.12 in	7.4 to 8.4
Bkg --	14 to 27 in	clay loam	moderate	1.89 to 2.39 in	7.4 to 8.4
Cg --	27 to 60 in	loam	moderate	4.63 to 5.29 in	7.4 to 8.4

Map Unit Description (MN)

Blue Earth County, Minnesota

929--Fieldon-Canisteo loams

Dassel

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Litchfield

Extent: 3 percent of the unit

Landform(s): outwash deltas

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

929--Fieldon-Canisteo loams

Glencoe

Extent: 2 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

932--Glencoe-Dassel loams

Glencoe

Extent: 65 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: fine-loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 26 in	loam	moderate	4.68 to 5.72 in	6.1 to 7.8
Bg -- 26 to 38 in	silty clay loam	moderate	2.13 to 2.60 in	6.1 to 7.8
Cg -- 38 to 60 in	silty clay loam	moderate	3.31 to 4.19 in	6.6 to 7.8

Dassel

Extent: 25 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: coarse-loamy outwash over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 24 in	loam	moderately rapid	4.32 to 5.76 in	5.6 to 7.3
Bg -- 24 to 38 in	stratified fine sand to loam	moderately rapid	1.70 to 2.41 in	5.6 to 7.3
Cg -- 38 to 60 in	fine sand	rapid	1.73 to 2.17 in	6.1 to 7.8

Map Unit Description (MN)

Blue Earth County, Minnesota

932--Glencoe-Dassel loams

Webster

Extent: 3 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

941--Kingston-Nicollet complex, 1 to 3 percent slopes

Kingston

Extent: 55 percent of the unit

Landform(s): rises on lake plains

Slope gradient: 1 to 3 percent

Parent material: fine-silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 17 in	silty clay loam	moderate	3.05 to 4.06 in	5.6 to 7.3
Bw -- 17 to 31 in	silty clay loam	moderate	2.27 to 2.83 in	5.6 to 7.8
C -- 31 to 60 in	silt loam	moderate	4.60 to 5.75 in	7.4 to 8.4

Nicollet

Extent: 35 percent of the unit

Landform(s): rises on lake plains

Slope gradient: 1 to 3 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 21 in	clay loam	moderate	3.55 to 4.59 in	5.6 to 7.3
Bw -- 21 to 44 in	clay loam	moderate	3.48 to 4.41 in	5.6 to 7.8
C -- 44 to 60 in	loam	moderate	2.20 to 2.99 in	7.4 to 8.4

Map Unit Description (MN)

Blue Earth County, Minnesota

941--Kingston-Nicollet complex, 1 to 3 percent slopes

Webster

Extent: 5 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Madelia

Extent: 5 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

946--Litchfield-Nicollet complex, 1 to 3 percent slopes

Litchfield

Extent: 55 percent of the unit

Landform(s): outwash deltas

Slope gradient: 1 to 3 percent

Parent material: sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated: 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: moderate

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 16 in	loamy fine sand	rapid	1.61 to 1.94 in	5.1 to 7.3
Bw --	16 to 48 in	loamy fine sand	moderately rapid	2.23 to 5.10 in	5.1 to 7.3
C --	48 to 52 in	fine sandy loam	moderately rapid	0.59 to 0.67 in	6.6 to 7.8
2C --	52 to 60 in	fine sand	rapid	0.63 to 0.79 in	6.1 to 7.8

Nicollet

Extent: 35 percent of the unit

Landform(s): outwash deltas

Slope gradient: 1 to 3 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 21 in	clay loam	moderate	3.55 to 4.59 in	5.6 to 7.3
Bw --	21 to 44 in	clay loam	moderate	3.48 to 4.41 in	5.6 to 7.8
C --	44 to 60 in	loam	moderate	2.20 to 2.99 in	7.4 to 8.4

Map Unit Description (MN)

Blue Earth County, Minnesota

946--Litchfield-Nicollet complex, 1 to 3 percent slopes

Granby

Extent: 4 percent of the unit

Landform(s): swales

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Webster

Extent: 3 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

947--Madelia-Webster silty clay loams

Madelia

Extent: 55 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: fine-silty lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 19 in	silty clay loam	moderate	3.40 to 4.54 in	6.1 to 7.3
Bg --	19 to 37 in	silty clay loam	moderate	2.90 to 3.98 in	6.6 to 7.8
C --	37 to 60 in	silt loam	moderate	3.65 to 5.02 in	7.4 to 8.4

Webster

Extent: 35 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 20 in	silty clay loam	moderate	3.81 to 4.22 in	6.6 to 7.3
Bg --	20 to 30 in	clay loam	moderate	1.57 to 1.77 in	6.6 to 7.8
C --	30 to 60 in	loam	moderate	4.19 to 5.69 in	7.4 to 8.4

Map Unit Description (MN)

Blue Earth County, Minnesota

947--Madelia-Webster silty clay loams

Kingston

Extent: 4 percent of the unit

Landform(s): lake plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Okoboji

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

947--Madelia-Webster silty clay loams

Glencoe

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

960E--Storden-Clarion loams, 18 to 24 percent slopes

Storden

Extent: 50 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 24 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
C --	8 to 60 in	loam	moderate	7.80 to 9.87 in	7.4 to 8.4

Clarion

Extent: 40 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 24 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 6e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 14 in	loam	moderate	2.83 to 3.12 in	5.6 to 7.3
Bw --	14 to 34 in	loam	moderate	3.35 to 3.74 in	5.6 to 7.8
C --	34 to 60 in	loam	moderate	4.42 to 4.94 in	7.4 to 8.4

Map Unit Description (MN)

Blue Earth County, Minnesota

960E--Storden-Clarion loams, 18 to 24 percent slopes

Terril

Extent: 5 percent of the unit

Landform(s): till plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Glencoe

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

960E--Storden-Clarion loams, 18 to 24 percent slopes

Webster

Extent: 2 percent of the unit

Landform(s): drainageways

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

961--Storden complex, very steep

Storden

Extent: 70 percent of the unit

Landform(s): hills on moraines

Slope gradient: 45 to 65 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated: 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 8 in	loam		moderate	1.57 to 1.73 in	7.4 to 8.4
C --	8 to 60 in	loam		moderate	7.80 to 9.87 in	7.4 to 8.4

Lester

Extent: 25 percent of the unit

Landform(s): hills on moraines

Slope gradient: 45 to 65 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 15 in	loam		moderate	2.99 to 3.29 in	5.6 to 7.3
Bt --	15 to 48 in	clay loam		moderate	4.96 to 6.28 in	5.6 to 7.3
C --	48 to 60 in	loam		moderate	1.65 to 2.13 in	7.4 to 7.8

Map Unit Description (MN)

Blue Earth County, Minnesota

961F--Storden complex, 24 to 45 percent slopes

Storden

Extent: 65 percent of the unit

Landform(s): hills on moraines

Slope gradient: 24 to 45 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated: 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 8 in	loam		moderate	1.57 to 1.73 in	7.4 to 8.4
C --	8 to 60 in	loam		moderate	7.80 to 9.87 in	7.4 to 8.4

Lester

Extent: 30 percent of the unit

Landform(s): hills on moraines

Slope gradient: 24 to 45 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>			<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A --	0 to 15 in	loam		moderate	2.99 to 3.29 in	5.6 to 7.3
Bt --	15 to 48 in	clay loam		moderate	4.96 to 6.28 in	5.6 to 7.3
C --	48 to 60 in	loam		moderate	1.65 to 2.13 in	7.4 to 7.8

Map Unit Description (MN)

Blue Earth County, Minnesota

961F--Storden complex, 24 to 45 percent slopes

Terril

Extent: 3 percent of the unit

Landform(s): till plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Estherville

Extent: 1 percent of the unit

Landform(s): terraces

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

961F--Storden complex, 24 to 45 percent slopes

Dickinson

Extent: 1 percent of the unit

Landform(s): outwash plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

968--Webster-Darfur-Granby complex

Webster

Extent: 55 percent of the unit

Landform(s): flats on moraines

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 20 in	silty clay loam	moderate	3.81 to 4.22 in	6.6 to 7.3
Bg -- 20 to 30 in	clay loam	moderate	1.57 to 1.77 in	6.6 to 7.8
C -- 30 to 60 in	loam	moderate	4.19 to 5.69 in	7.4 to 8.4

Darfur

Extent: 20 percent of the unit

Landform(s): flats on moraines

Slope gradient: 0 to 2 percent

Parent material: coarse-loamy outwash over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 19 in	loam	moderate	3.78 to 4.16 in	6.1 to 7.3
Bg -- 19 to 31 in	fine sandy loam	moderately rapid	1.83 to 2.07 in	6.6 to 7.8
C -- 31 to 60 in	stratified fine sand to loamy fine sand to fine sandy loam	moderately rapid	2.30 to 2.87 in	6.6 to 8.4

Map Unit Description (MN)

Blue Earth County, Minnesota

968--Webster-Darfur-Granby complex

Granby

Extent: 15 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: coarse-loamy outwash over sandy outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated: 4w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 18 in	fine sandy loam	moderately rapid	2.90 to 3.26 in	5.6 to 7.3
Bg -- 18 to 42 in	loamy fine sand	rapid	1.20 to 2.88 in	5.6 to 7.8
Cg -- 42 to 60 in	fine sand	rapid	0.89 to 1.59 in	6.6 to 8.4

Nicollet

Extent: 5 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

968--Webster-Darfur-Granby complex

Litchfield

Extent: 5 percent of the unit

Landform(s): outwash deltas

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

978--Cordova-Rolfe complex

Cordova

Extent: 60 percent of the unit

Landform(s): flats on moraines

Slope gradient: 0 to 2 percent

Parent material: fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 13 in	clay loam	moderately slow	2.34 to 2.86 in	6.1 to 7.3
Bg -- 13 to 32 in	clay loam	moderately slow	2.83 to 3.59 in	5.1 to 6.5
Cg -- 32 to 60 in	loam	moderate	3.91 to 4.47 in	7.4 to 8.4

Rolfe

Extent: 30 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: clayey alluvium over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	silt loam	moderate	1.56 to 1.70 in	5.1 to 7.3
E -- 7 to 17 in	silt loam	moderate	2.17 to 2.36 in	5.1 to 7.3
Btg -- 17 to 43 in	clay	slow	2.86 to 3.38 in	6.1 to 7.3
Cg -- 43 to 60 in	silty clay loam	moderate	2.37 to 2.71 in	6.1 to 8.4

Map Unit Description (MN)

Blue Earth County, Minnesota

978--Cordova-Rolfe complex

Le Sueur

Extent: 5 percent of the unit

Landform(s): moraines

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Glencoe

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

992--Rock outcrop-Copaston complex, very steep

Rock outcrop

Extent: 60 percent of the unit

Landform(s): escarpments, terraces

Slope gradient: 45 to 60 percent

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Copaston

Extent: 30 percent of the unit

Landform(s): escarpments, terraces

Slope gradient: 45 to 60 percent

Parent material: fine-loamy till over limestone bedrock

Restrictive feature(s): lithic bedrock at 12 to 20 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .28

Land capability, nonirrigated: 7s

Hydric soil: no

Hydrologic group: D

Potential for frost action: moderate

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

A --	0 to 8 in	loam	moderate	1.57 to 1.73 in	5.6 to 7.3
Bw --	8 to 12 in	sandy loam	moderately rapid	0.47 to 0.55 in	5.6 to 7.8
2R --	12 to 16 in	unweathered bedrock	moderate		

Map Unit Description (MN)

Blue Earth County, Minnesota

992--Rock outcrop-Copaston complex, very steep

Terril

Extent: 10 percent of the unit

Landform(s): till plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

996--Beauford-Barbert complex

Beauford

Extent: 60 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4

Wind erodibility index (WEI): 86

Kw factor (surface layer) .17

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 18 in	clay	slow	2.35 to 2.90 in	6.6 to 7.3
Bg -- 18 to 40 in	clay	slow	2.20 to 3.09 in	6.6 to 7.3
Cg -- 40 to 60 in	clay	slow	1.77 to 2.56 in	7.4 to 7.8

Barbert

Extent: 30 percent of the unit

Landform(s): depressions on lake plains

Slope gradient: 0 to 1 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 4 in	silt loam	moderate	0.87 to 0.94 in	5.1 to 6.5
E -- 4 to 17 in	silt loam	moderate	2.86 to 3.12 in	5.1 to 6.5
Btg -- 17 to 43 in	clay	slow	2.60 to 3.64 in	5.1 to 7.3
Cg -- 43 to 60 in	silty clay loam	moderate	3.72 to 4.06 in	5.1 to 6.5

Map Unit Description (MN)

Blue Earth County, Minnesota

996--Beauford-Barbert complex

Lura

Extent: 5 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Waldorf

Extent: 3 percent of the unit

Landform(s): flats

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

996--Beauford-Barbert complex

Marna

Extent: 2 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

997--Marna-Barbert complex

Marna

Extent: 60 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: clayey lacustrine deposits over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 20 in	silty clay loam	slow	3.61 to 4.42 in	6.1 to 7.3
Bg -- 20 to 32 in	clay	slow	1.54 to 1.89 in	6.1 to 7.3
Cg -- 32 to 60 in	loam	moderate	3.91 to 5.31 in	6.6 to 8.4

Barbert

Extent: 30 percent of the unit

Landform(s): depressions on lake plains

Slope gradient: 0 to 1 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 4 in	silt loam	moderate	0.87 to 0.94 in	5.1 to 6.5
E -- 4 to 17 in	silt loam	moderate	2.86 to 3.12 in	5.1 to 6.5
Btg -- 17 to 43 in	clay	slow	2.60 to 3.64 in	5.1 to 7.3
Cg -- 43 to 60 in	silty clay loam	moderate	3.72 to 4.06 in	5.1 to 6.5

Map Unit Description (MN)

Blue Earth County, Minnesota

997--Marna-Barbert complex

Lura

Extent: 10 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

998--Minnetonka-Barbert complex

Minnetonka

Extent: 60 percent of the unit

Landform(s): flats on lake plains

Slope gradient: 0 to 2 percent

Parent material: clayey lacustrine deposits over fine-loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 19 in	silty clay loam	moderately slow	3.40 to 4.16 in	5.6 to 7.3
Btg --	19 to 40 in	silty clay	slow	2.76 to 4.04 in	5.6 to 7.3
Cg --	40 to 60 in	loam	moderate	3.15 to 4.13 in	6.6 to 7.8

Barbert

Extent: 30 percent of the unit

Landform(s): depressions on lake plains

Slope gradient: 0 to 1 percent

Parent material: clayey lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 4 in	silt loam	moderate	0.87 to 0.94 in	5.1 to 6.5
E --	4 to 17 in	silt loam	moderate	2.86 to 3.12 in	5.1 to 6.5
Btg --	17 to 43 in	clay	slow	2.60 to 3.64 in	5.1 to 7.3
Cg --	43 to 60 in	silty clay loam	moderate	3.72 to 4.06 in	5.1 to 6.5

Map Unit Description (MN)

Blue Earth County, Minnesota

998--Minnetonka-Barbert complex

Marna

Extent: 4 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Lura

Extent: 3 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

998--Minnetonka-Barbert complex

Shorewood

Extent: 3 percent of the unit

Landform(s): rises

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: no

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

1001--Alluvial land, occasionally flooded

Alluvial land, occasionally flooded

Extent: 90 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: fine-loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: occasional

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 25 in	silty clay loam	moderate	5.04 to 5.54 in	6.1 to 7.3
AC,Cg1 -- 25 to 54 in	loam	moderate	5.75 to 6.32 in	6.1 to 7.3
Cg2 -- 54 to 60 in	sandy loam	moderately rapid	0.77 to 1.00 in	6.1 to 7.8

Comfrey

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

1002--Alluvial land, frequently flooded

Alluvial land, frequently flooded

Extent: 90 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: fine-loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated: 5w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1 -- 0 to 12 in	silty clay loam	moderate	2.36 to 2.60 in	6.1 to 7.3
A2 -- 12 to 30 in	loam	moderate	3.62 to 3.98 in	6.1 to 7.3
A3 -- 30 to 55 in	stratified fine sandy loam to loam	moderate	5.04 to 5.54 in	6.1 to 7.3
AB,Bg -- 55 to 80 in	fine sandy loam	moderately rapid	3.22 to 4.22 in	6.1 to 7.8

Comfrey

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

1004--Alluvial land, gently sloping

Alluvial land, rarely flooded

Extent: 90 percent of the unit

Landform(s): rises on flood plains

Slope gradient: 2 to 6 percent

Parent material: coarse-loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: rare

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 24 in	fine sandy loam	moderately rapid	3.84 to 4.32 in	6.1 to 7.3
AB -- 24 to 52 in	fine sandy loam	moderately rapid	4.47 to 5.03 in	6.1 to 7.3
Bw1 -- 52 to 57 in	fine sandy loam	moderately rapid	0.56 to 0.67 in	5.6 to 7.3
Bw2,C -- 57 to 80 in	stratified fine sand to loamy fine sand to fine sandy loam	moderately rapid	2.74 to 4.34 in	5.6 to 7.8

Comfrey

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

1007--Alluvial-Urban land complex

Alluvial, rarely flooded

Extent: 50 percent of the unit

Landform(s): flood plains

Slope gradient: 0 to 2 percent

Parent material: coarse-loamy alluvium

Restrictive feature(s): greater than 60 inches

Flooding: rare

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Urban land, rarely flooded

Extent: 30 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding: rare

Ponding: none

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

1007--Alluvial-Urban land complex

Comfrey

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Oshawa

Extent: 10 percent of the unit

Landform(s): flood plains

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Map Unit Description (MN)

Blue Earth County, Minnesota

1032--Lake beaches

Beaches, lake

Extent: 100 percent of the unit

Landform(s): beaches on moraines

Slope gradient: 1 to 3 percent

Parent material: beach sand over loamy till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor):

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .15

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group:

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 6 in	loamy fine sand	rapid	0.59 to 0.71 in	6.1 to 7.8
Bg -- 6 to 34 in	sand	rapid	1.40 to 3.35 in	6.1 to 7.8
2Cg -- 34 to 80 in	loam	moderate	6.91 to 8.75 in	7.4 to 8.4

1039--Urban land, 0 to 2 percent slopes

Urban land

Extent: 100 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 2 percent

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: unranked

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

1053--Marsh

Marsh

Extent: 90 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: muck herbaceous organic material over
coprogenic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .02

Land capability, nonirrigated: 8w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oa1 -- 0 to 35 in	muck	moderately rapid	12.26 to 15.77 in	
Oa2 -- 35 to 60 in	coprogenous earth	moderate	4.46 to 5.95 in	

Canisteo

Extent: 10 percent of the unit

Landform(s): rims

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

1800--Caron mucky peat

Caron

Extent: 85 percent of the unit

Landform(s): depressions on terraces

Slope gradient: 0 to 1 percent

Parent material: muck herbaceous organic material over
coprogenic material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 8

Wind erodibility index (WEI): 0

Kw factor (surface layer) .02

Land capability, nonirrigated: 8w

Hydric soil: yes

Hydrologic group: A/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Oe --	0 to 60 in mucky peat	rapid	23.94 to 29.92 in	

Tilfer

Extent: 15 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

Blue Earth County, Minnesota

1801B--Grogan loamy fine sand, 2 to 6 percent slopes

Grogan

Extent: 90 percent of the unit

Landform(s): deltas

Slope gradient: 2 to 6 percent

Parent material: stratified sandy and silty glaciolacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .20

Land capability, nonirrigated: 2e

Hydric soil: no

Hydrologic group: A

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 13 in	loamy fine sand	moderately rapid	1.95 to 2.47 in	5.6 to 7.3
C -- 13 to 60 in	stratified loamy very fine sand to silt loam	moderately rapid	7.96 to 8.90 in	7.4 to 8.4

Dassel

Extent: 10 percent of the unit

Landform(s): depressions

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil: yes

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

I-W--Intermittent water

Water, intermittent

Extent: 100 percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil:

Hydrologic group:

Potential for frost action:

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

L13A--Klossner muck, depressional, 0 to 1 percent slopes

Klossner, drained

Extent: 65 to 85 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: herbaceous organic material over loamy
glaciofluvial deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 1

Wind erodibility group (WEG): 2

Wind erodibility index (WEI): 134

Kw factor (surface layer) .02

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative soil profile:

Texture

Permeability

*Available water
capacity*

pH

Op -- 0 to 10 in

muck

moderately rapid

3.44 to 4.72 in

Oa -- 10 to 26 in

muck

moderately rapid

5.65 to 7.75 in

2A1 -- 26 to 36 in

mucky silty clay loam

moderate

2.17 to 2.56 in

2A2 -- 36 to 48 in

silty clay loam

moderate

2.20 to 2.69 in

2Cg -- 48 to 80 in

loam

moderate

4.78 to 6.06 in

Map Unit Description (MN)

Blue Earth County, Minnesota

L84A--Glencoe clay loam, depressional, 0 to 1 percent slopes

Glencoe, depressional

Extent: 75 to 100 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A --	0 to 24 in	clay loam	moderate	4.32 to 5.28 in	6.1 to 7.8
ABg --	24 to 35 in	clay loam	moderate	1.98 to 2.43 in	6.1 to 7.8
Bg --	35 to 48 in	loam	moderate	1.95 to 2.47 in	6.6 to 7.8
Cg --	48 to 60 in	loam	moderate	1.77 to 2.24 in	7.4 to 8.4

Map Unit Description (MN)

Blue Earth County, Minnesota

L85A--Nicollet clay loam, 1 to 3 percent slopes

Nicollet

Extent: 70 to 95 percent of the unit

Landform(s): flats on moraines, rises on moraines

Slope gradient: 1 to 3 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated: 1

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 17 in	clay loam	moderate	2.88 to 3.72 in	5.6 to 7.3
Bw,Bg -- 17 to 33 in	clay loam	moderate	2.42 to 3.07 in	5.6 to 7.3
Bg -- 33 to 36 in	clay loam	moderate	0.41 to 0.52 in	7.4 to 8.4
Cg -- 36 to 60 in	loam	moderate	3.60 to 4.56 in	7.4 to 8.4

W--Water

Water

Extent: 100 percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated:

Hydric soil:

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Blue Earth County, Minnesota

This report provides a semitabular listing of some soil and site properties and interpretations that are valuable in communicating the concept of a map unit. The report also provides easy access to the commonly used conservation planning information in one place. The major soil components in each map unit are displayed. Minor components may be displayed if they are included in the database and are selected at the time the report is generated.